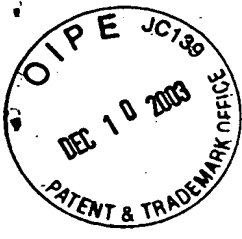


FIG. 1



NORTEL NETWORKS - PROBLEM MANAGER				
PROBLEM LIST				
PROBLEM	VIOLAT'	ALARMS	DEGRAD' COST	TIME
SONET: EXPERIENCING TRAFFIC LOSS, RECEIVE NOT PROTECTED.	9	8	10	4 1/3/00 14:39:48
SONET: EXPERIENCING TRAFFIC LOSS, TRANSMIT NOT PROTECTED	9	9	7	5 1/3/00 14:24:42
FR: SUBSYSTEM FAILURE, CONNECTIONS ARE DOWN	9	23	14	3 1/3/00 14:16:31
ATM: LOGICAL PATH SIGNAL LOST	8	22	14	5 1/3/00 14:13:36
SONET: REMOTE LINE HAS FAILED	4	8	6	5 1/3/00 14:11:34
SWITCHING: TRUNK CONNECTIONS ARE DOWN	9	11	24	4 1/3/00 14:15:09

CAUSE AND CORRECTION:	TRANSMIT TRAFFIC IS NOT PROTECTED ON NE 294 OC3G1s. THE NEAR-END OPTICAL CARD DETECTED A PROBLEM ON ITS TRANSMITTED OPTICAL SIGNAL
DOCUMENT REFERENCE:	432-3653-821-ubal

FIG.2A



3/12

216

218

220

ALARMS | PERFORMANCE DEGRADATIONS

210

CUSTOMER	CUST. SERVICE	LEVEL	METRIC	DELIVERED	AGREED	PENALTY/IMPACT
ACURA CANADA	FRAME RELAY	SILVER	SERVICE AVAIL.	95.2%	> 98.5%	\$300/s
AIR CANADA	VPN	GOLD	MTBF	2 DAYS	< 5 DAYS	\$500/s
GENERAL MOTORS	MEGAROUTE	GOLD	LATENCY	168 msec	< 150 msec	\$80/s
JOE'S GARAGE	IP	BRONZE	DIAL PORT AVAIL	93%	> 95%	\$25/s
MICROCELL SOLUT'N	AMPS TRUNK	GOLD +	SERVICE AVAIL.	96.3%	> 99.5%	\$500/s
MICROCELL SOLUT'N	AMPS TRUNK	GOLD +	NETWORK AVAIL	98%	> 99.9%	\$750/s
NATIONAL POST	FRAME RELAY	GOLD +	PACKET LOSS	1.75%	> 0.7%	\$150/s
SEARS CANADA	FRAME RELAY	GOLD	PACKET LOSS	1.75%	< 1%	\$50/s
SYMPATICO	IP VPN	GOLD	MTBF	2 DAYS	> 5 DAYS	\$500/s

9 SLA(s) TOTAL AT LAST REFRESH: 02/02/00 14:35:22

222

METRIC	AGREED	PENALTY	METRIC	AGREED	PENALTY
(MTTR):	< 5 HOURS	\$200/hr	PORT AVAIL.:	> 95.0%	\$25/sec
(MTBF):	> 3 DAYS	\$500/sec	LATENCY:	< 150msec	\$80/sec
NETWORK AVAIL.:	99.7%	\$750/sec	PACKET LOSS:	99.7%	\$50/sec
SERVICE AVAIL.:	99.5%	\$500/sec	DISCARDS:	< 0.8%	\$50/sec

CONTACT INFORMATION:

MIKE BENDER
 COMPANY NAME
 732 STREET ST
 OTTAWA, CANADA
 K1K 2K2
 e-mail: mbender@company.com

PHONE: (613) - 442-7276
 CELL: (613) - 367-8944
 FAX: (613) - 236-6745

224

VIEW CONTRACT

FIG. 2B

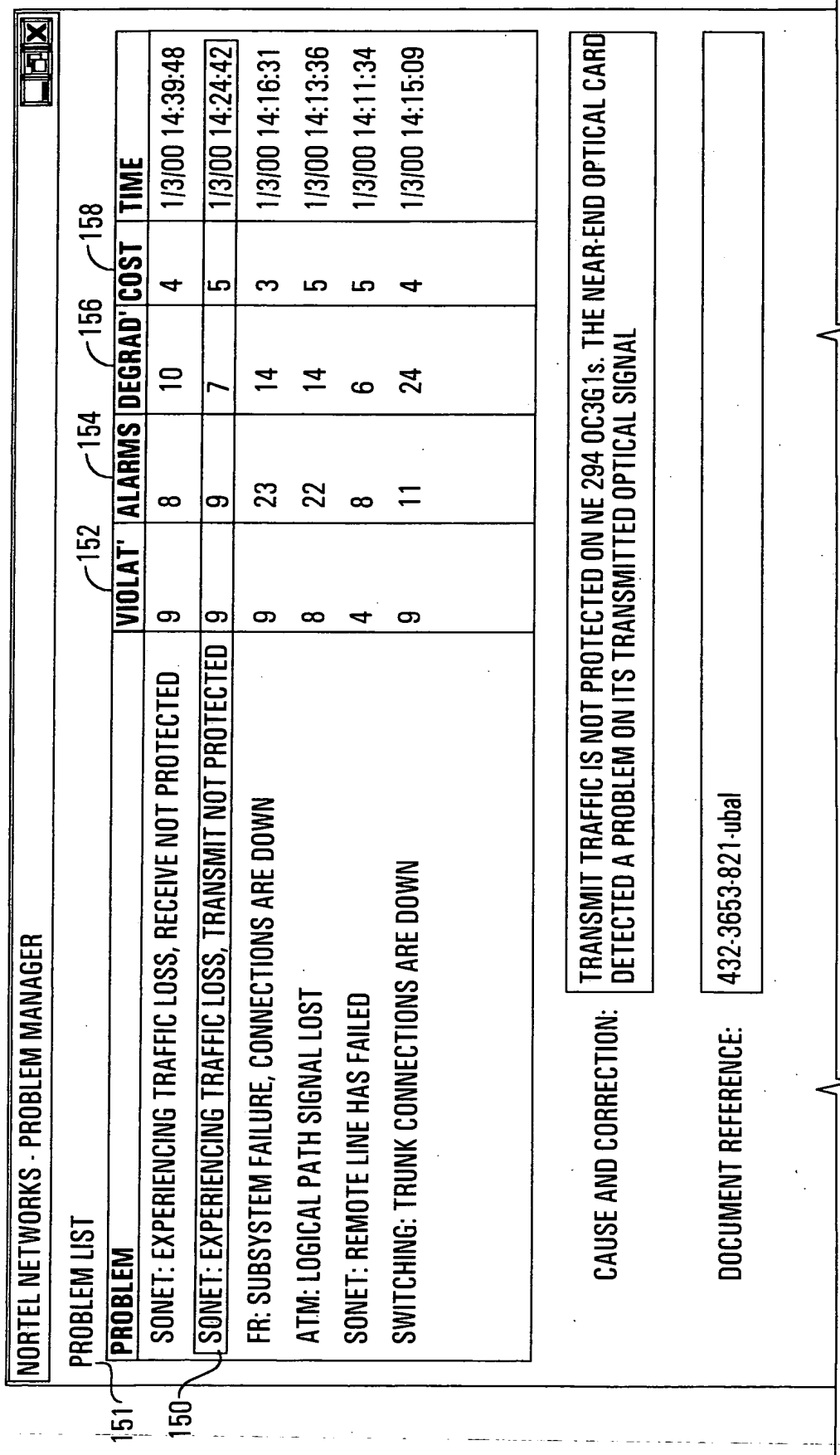


FIG. 3A



5/12

DETAILS

SERVICE VIOLATIONS ALARMS PERFORMANCE DEGRADATIONS

NE NAME	TYPE	UNIT	REASON	SEVERITY	TIME
1008 BoATM01	COM	COMMUNI...	Rx AIS	CRITICAL SA	1/3/00 14:50:07
1008 BoATM01	COM	COMMUNI...	COMMSUBSYSTEM	MAJOR SA	1/3/00 14:50:29
1008 BoATM01	COM	CELL	LCD	CRITICAL SA	1/3/00 14:50:04
1008 BoATM01	COM	NEAR PATH	DEGRADED SIGNAL	MINOR NSA	1/3/00 14:50:13
1011 CleoATM01	COM	OPERATOR	OPERATION COND	CRITICAL SA	1/3/00 14:52:24
1011 CleoATM01	COM	OPERATOR	OPERATION COND	CRITICAL SA	1/3/00 14:52:24
1011 CleoATM01	COM	COMMUNI...	COMMSUBSYSTEM	MAJOR SA	1/3/00 14:52:43
514 CleoATM01	FAC	OC3 G4	Rx AIS	WARNING NSA	1/3/00 14:52:32
1008 BoATM01	COM	CELL	LCD	MAJOR SA	1/3/00 14:50:04

9 ALARM(S) TOTAL AT LAST REFRESH: 02/02/00 14:35:22 REFRESH NOW

ALARM TYPE: COMMUNICATIONS ACKNOWLEDGED BY: LIQIANG REASON:

COMPONENT: Lp/2 SONET/0 PATH/0 DISPLAY: BMERHFBB:0:0

ALARM: CRITICAL HOSTNAME: BMERHFBB

TIME: 1/3/00 8:43

LOSS OF FRAME. LOSS OF CELL DELINIATION HAS BEEN DETECTED. CHECK THE CABLING AND CONFIGURATION.

212

222

FIG. 3B

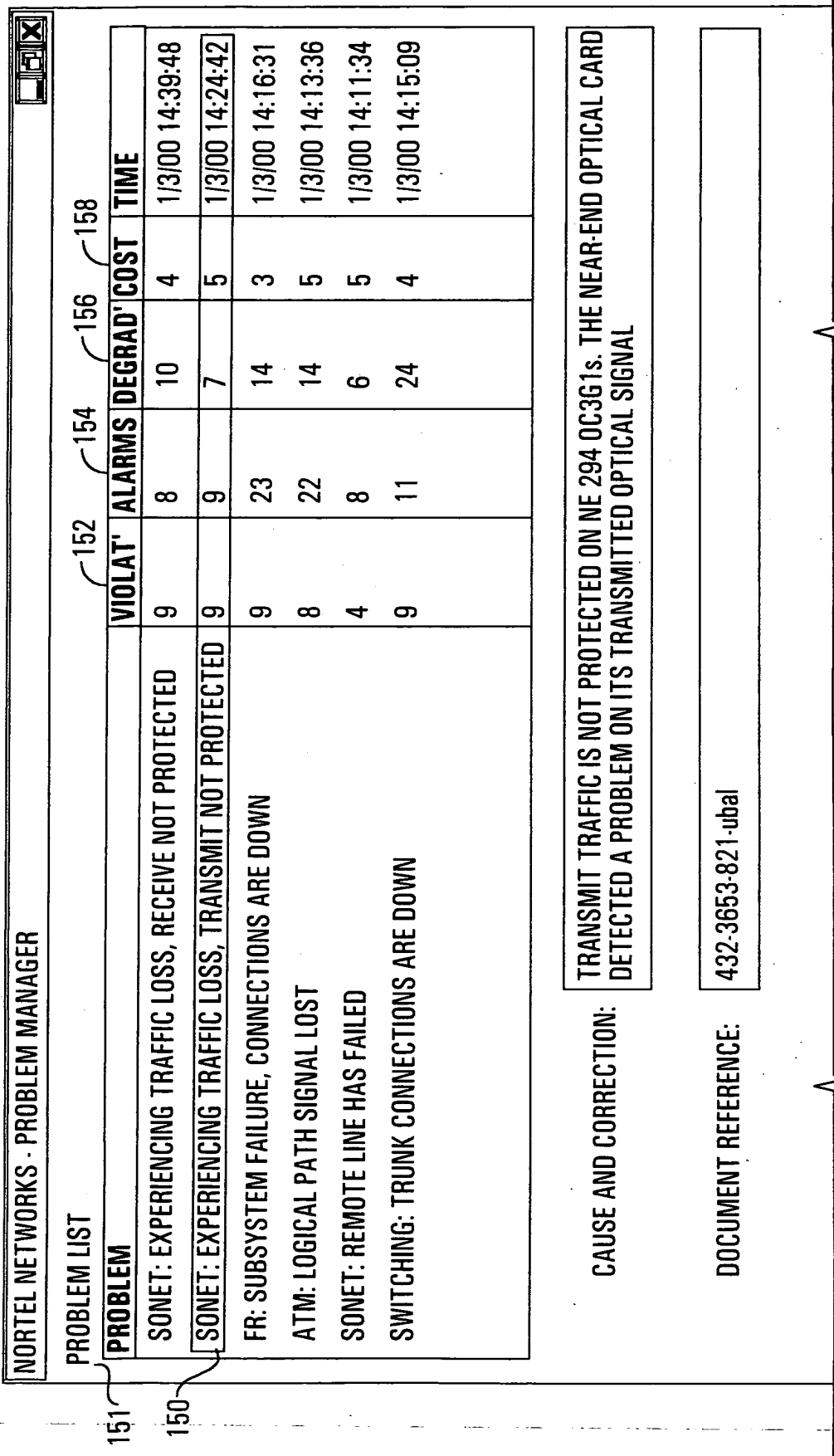


FIG. 4A

7/12

DETAILS

SERVICE VIOLATIONS | ALARMS | PERFORMANCE DEGRADATIONS

LINE NAME	TYPE	METRIC	ACTUAL	THRESHOLD	NETWORK SERVICE	TIME
BLUE-HAWKRTR	CLLI-AB	BECN	592	615	FRAME RELAY	1/3/00 14:51:55
321 TERRANCE NT	DS1 G10 2	LINE Rx ES	900	800	SONET BACKBONE	1/3/00 9:15:01
562 BALLYRTR	CLLI-AC	MARG. CALL RATE	10%	10%	VOIP	1/3/00 14:13:23
352 JANERTR	CLLI-AD	UNACC. CALL RATE	3%	4%	VOIP	1/3/00 14:52:12
474 BANKRTR	CLLI-AA	UNACC. CALL RATE	7%	7%	VOIP	1/3/00 14:37:42
241 ROCKTN	DS1 G10 2	LINE Rx ES	900	800	FRAME RELAY CH.	1/3/00 9:16:43
352 UPSIDERTR	CLLI-AD	UNACC. CALL RAE	3%	4%	VOIP	1/3/00 9:16:49

7 PERFORMANCE DEGRADATION(S) TOTAL AT LAST REFRESH : 02/02/00 14:35:22

PERFORMANCE DEGRADATION GRAPHICAL DETAILS:

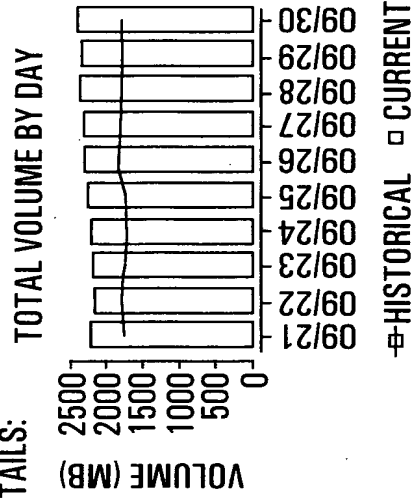


FIG. 4B

214

222

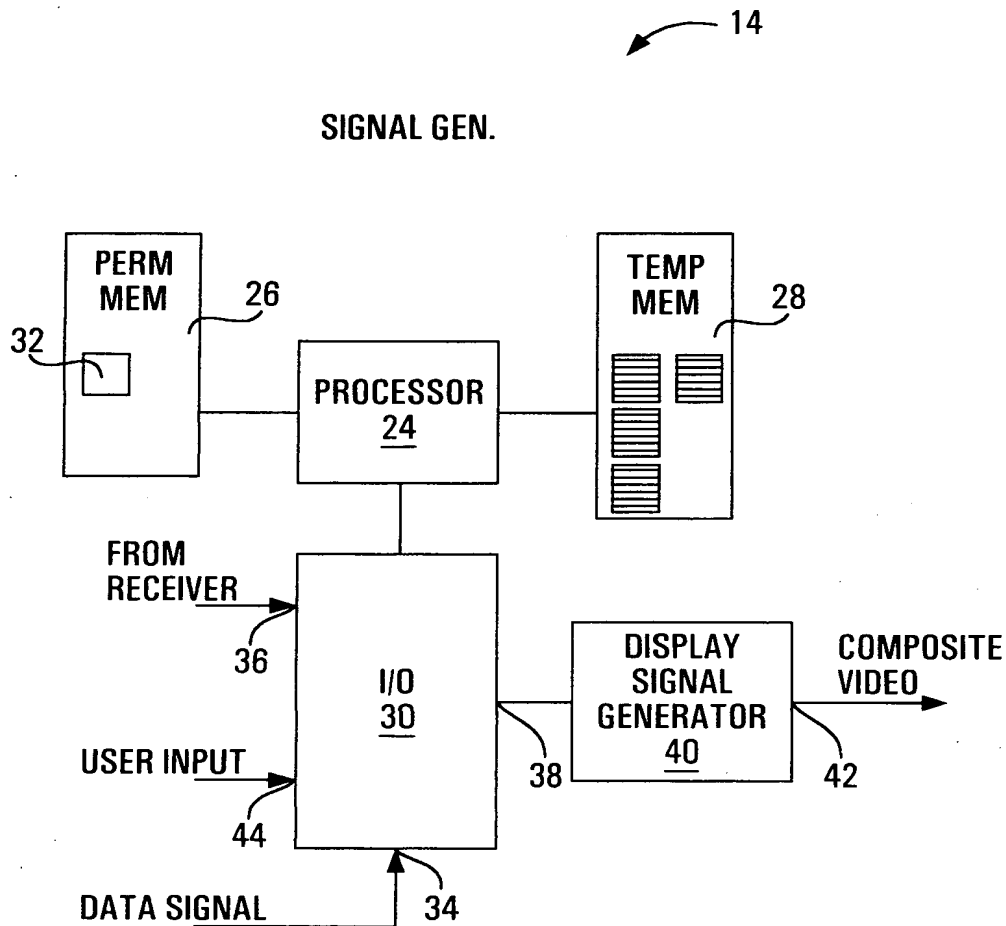
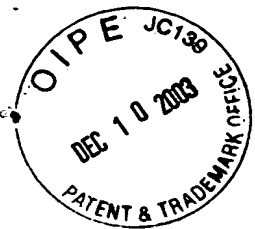


FIG. 5



9/12

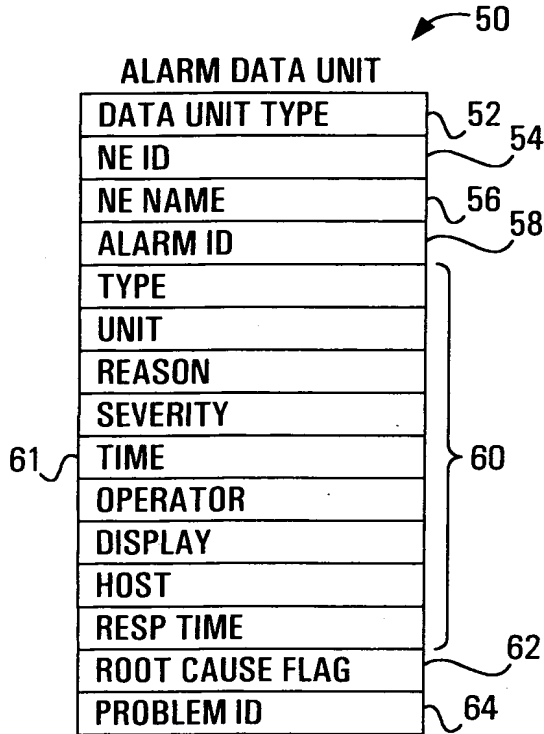


FIG. 6

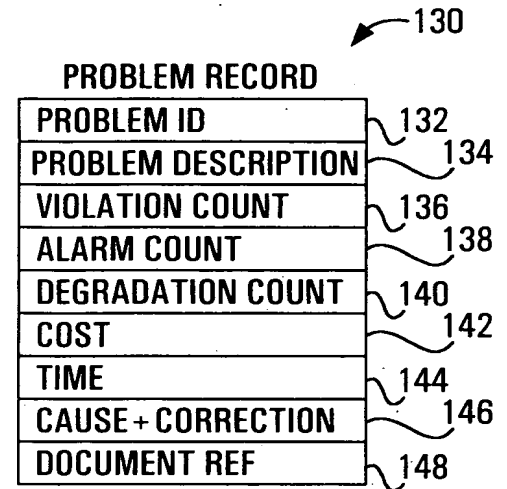


FIG. 9

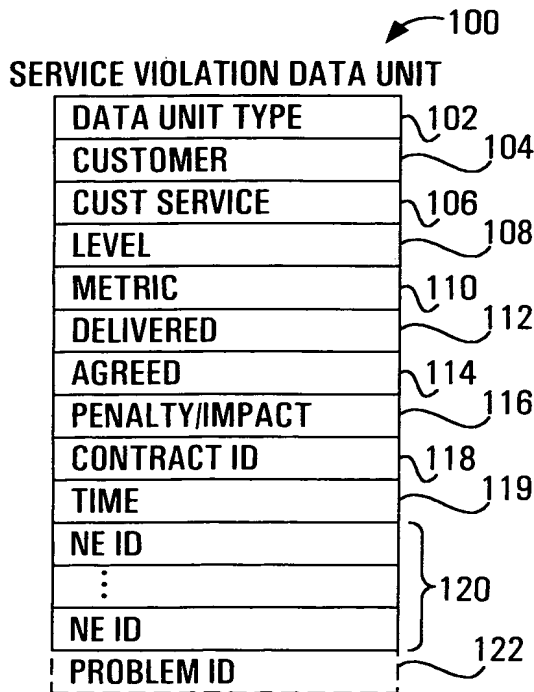


FIG. 8

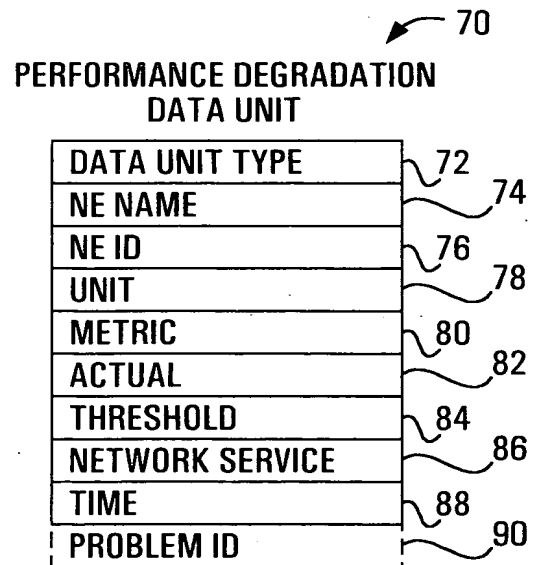


FIG. 7



10/12

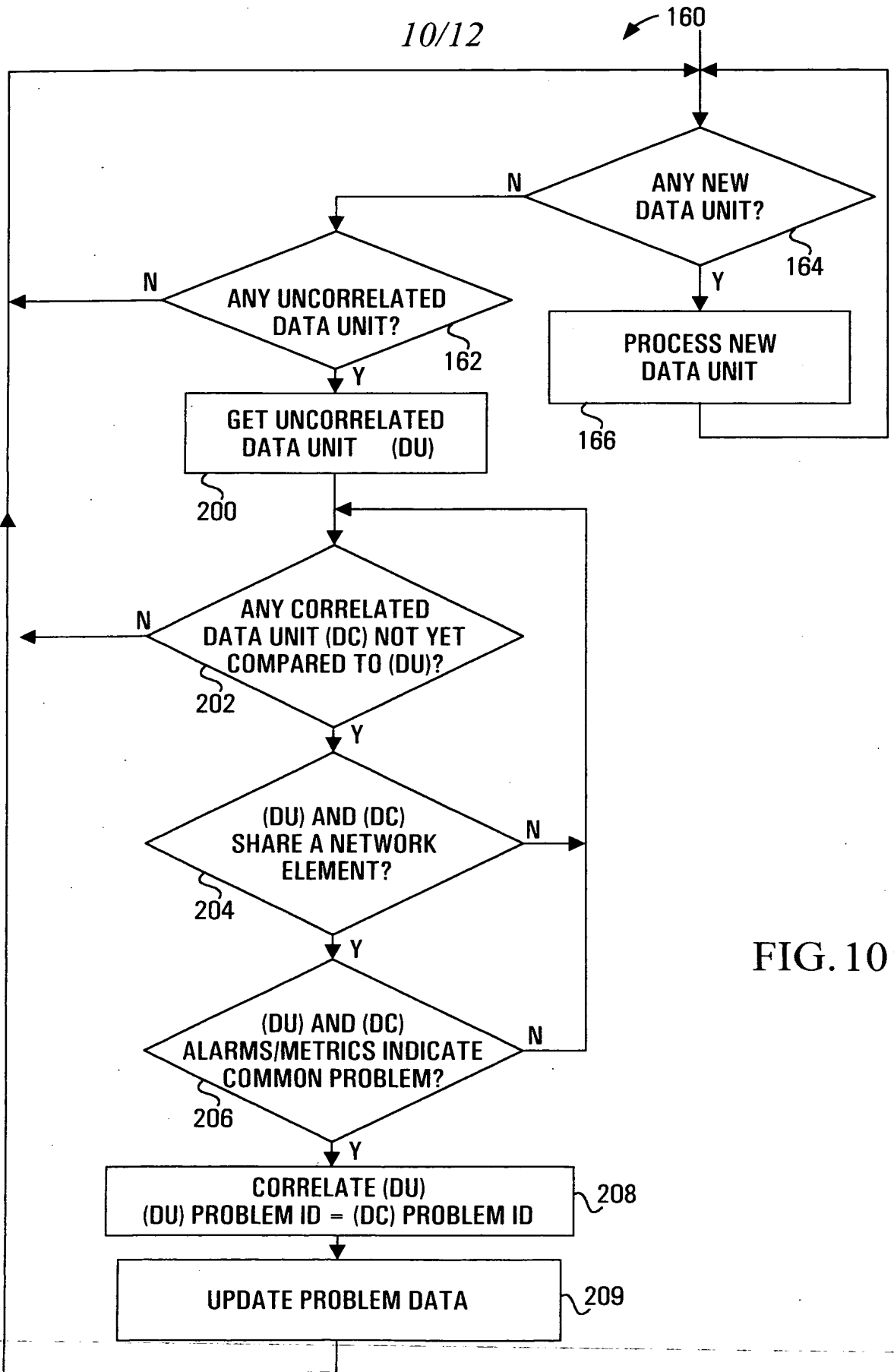
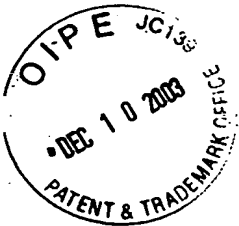


FIG. 10



11/12

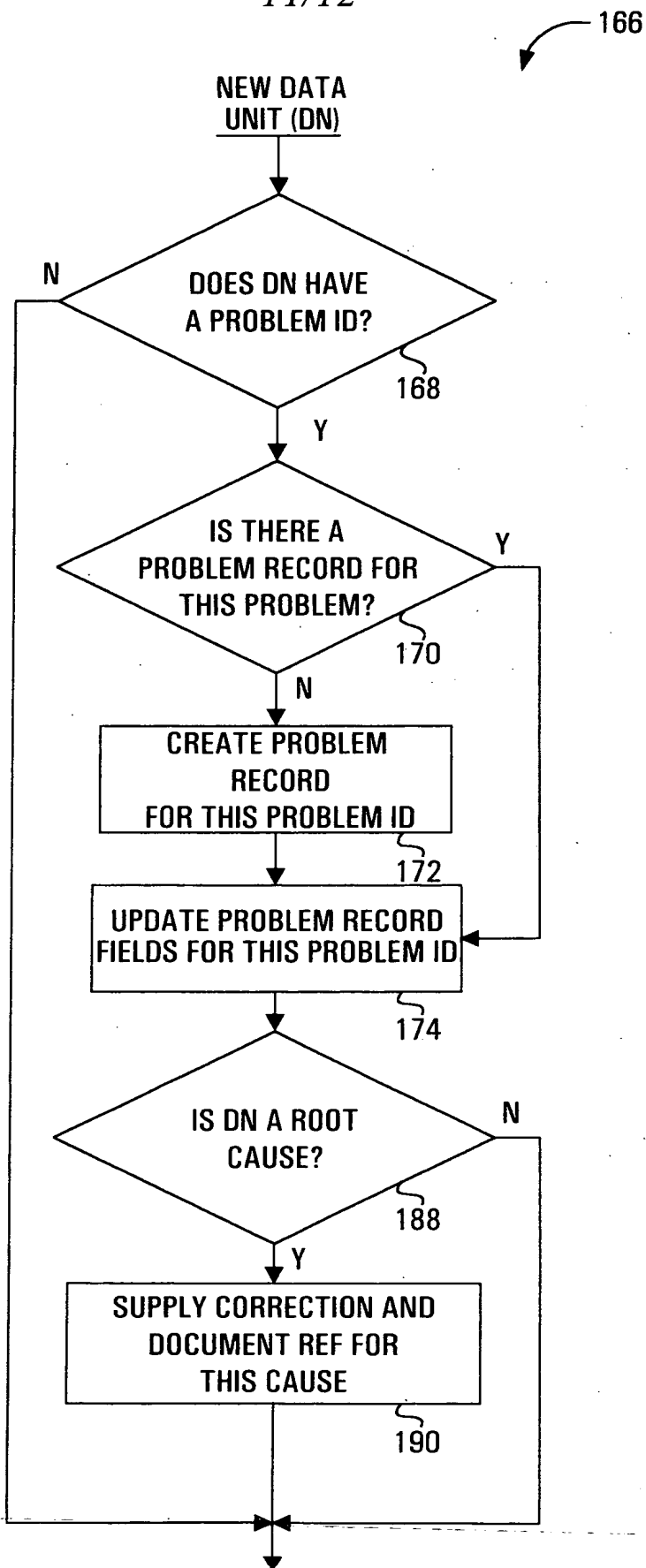


FIG. 11



12/12

176

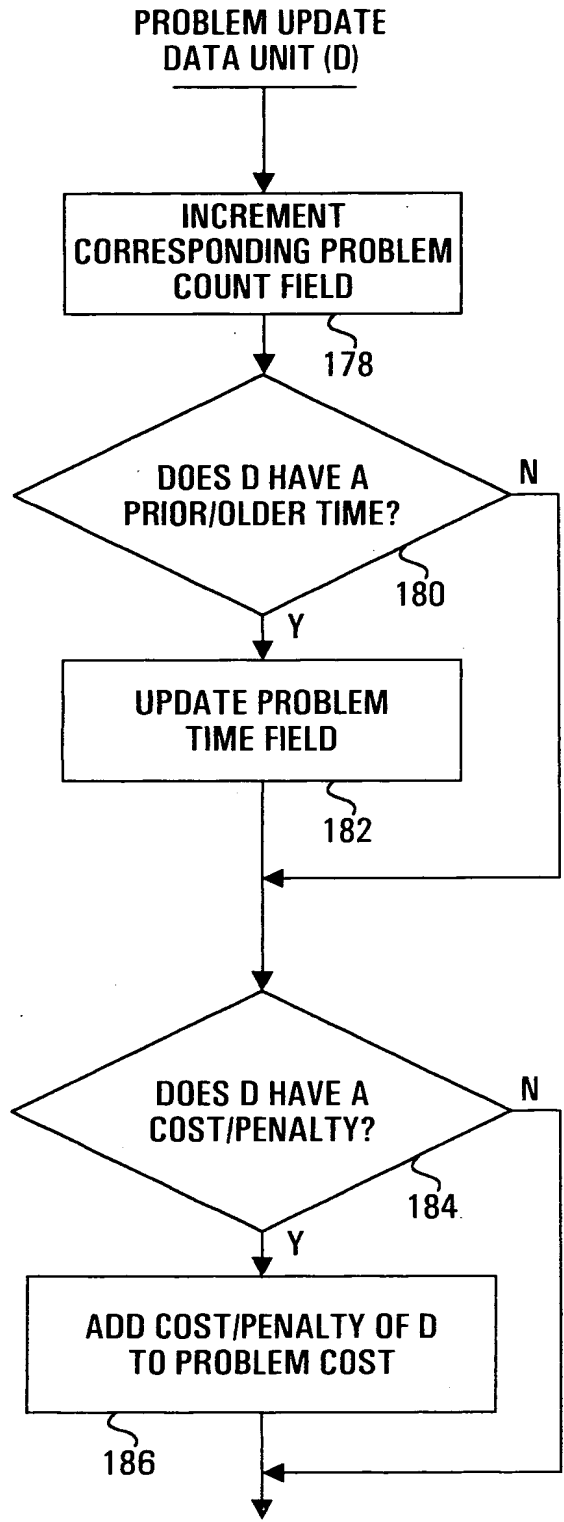


FIG. 12